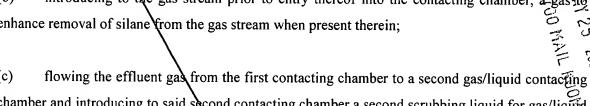
In the Claims¹

Please amend claims 21, 26 and 27 to read as follows:

21. (Twice Amended) A scrubbing process for the abatement of a gas component in a gas stream containing same, said scrubbing process comprising introducing the gas stream and a scrubbing liquid to a first gas/liquid contacting chamber and effecting gas/liquid contacting therein, wherein said process additionally at least one of the steps of:

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- introduding a chemical reagent for contact with the gas component to remove same from the (a) gas stream in said as/liquid contacting;
- introducing to the gas stream prior to entry thereof into the contacting chamber, a gas it (b) enhance removal of silane from the gas stream when present therein;



(c) chamber and introducing to said second contacting chamber a second scrubbing liquid for gas/liquid contacting therein, wherein the first gas/liquid contacting in the first chamber comprises cocurrent flow of the gas stream and scrubbing liquid and wherein the second gas/liquid contacting in the second contacting chamber comprises countercurrent flow of the gas stream and the second scrubbing liquid through the second contacting chamber, wherein said second contacting chamber has a smaller volume than that of said first contacting chamber;

- (d) introducing an antifoam agent to scrubbing liquid for said gas/liquid contacting, to suppress foam production in the contacting chamber;
- (e) suppressing deposition of calcium carbonate from crubbing liquid containing calcium, including a step selected from the group consisting of:

Applicants have provided a marked-up version of the amended claims 21, 26, and 27 in Appendix A, and a clean set of all pending claims, amended to date, in Appendix B.

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- adjusting the pH of the scrubbing liquid to maintain pH thereof below 8.5;
- (3) Nowing the scrubbing liquid through a lime-soda ash bed prior to use of the scrubbing liquid in the contacting chamber; and
- (4) precipitating the calcium content of the scrubbing liquid prior to use of the scrubbing liquid in the contacting chamber; and
- (f) suppressing solids formation in a passage of the scrubbing system, said passage comprising a conduit to a pressure sensing device, including a step selected from the group consisting of flowing a purge gas through the passage to suppress solids formation therein, and heating the passage to suppress solids formation therein.

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26. (Amended) A scrubbing process for treatment of an effluent gas including acid gas components and water-scrubbable components other than acid gas component, said process comprising:

scrubbing the effluent gas with a neutral aqueous scrubbing liquid in a first scrubbing zone to remove the acid gas components of the effluent gas, with co-current flow contacting of the aqueous scrubbing liquid and effluent gas with one another to yield effluent gas reduced in acid gas components;

flowing the effluent gas reduced in acid gas components from the first scrubber unit to a second scrubber unit; and

scrubbing the effluent gas with a second aqueous scrubbing liquid in the second scrubbing zone to remove water-scrubbable components other than acid gas component from the effluent gas, with counter -current flow contacting of the second aqueous scrubbing liquid and effluent gas with one another to yield effluent gas reduced in acid gas components and water-scrubbable components other than acid gas components, wherein said second scrubbing zone has a volume smaller than that of said first scrubbing zone.

27. (Amended) The process according to claim 26, wherein the first scrubbing zone is a vessel enclosing an interior volume containing a bed of packing medium ②

Please add the following claims 51-64:

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51. The process according to claim 26 wherein the scrubbing liquid in the second scrubbing zone contains no caustic reagent.

- 52. The process according to claim 21 wherein the scrubbing liquid in the first contacting chamber is neutral water.
- 53. The process according to claim 21 wherein the first scrubbing liquid contains no caustic reagent.
- 54. The process according to claim 21 wherein the second scrubbing liquid contains no caustic reagent.
- The process according to claim 21 wherein the second contacting chamber has a smaller diameter than the first contacting chamber.
- 56. The process according to claim 26 wherein the second scrubbing zone has a smaller diameter than the first scrubbing zone.
- The process according to claim 21 wherein the diameter of the second contacting chamber is about one-fifth the diameter of the first contacting chamber.
- 58. The process according to claim 26 wherein the diameter of the second scrubbing zone is about one-lifth the diameter of the first scrubbing zone.
- 59. The process according to claim 21 wherein the second contacting chamber has a relatively substantially lower water flow rate than the first contacting chamber.
- 60. The process according to claim 26 wherein the second scrubbing zone has a relatively substantially lower water flow rate than the first scrubbing zone.
- 61. A scrubbing process for the abatement of a gas component in a gas stream containing same, said scrubbing process comprising: introducing the gas stream and a scrubbing liquid to a first gas/liquid contacting chamber and effecting gas/liquid contacting therein; flowing the effluent gas from the first contacting chamber to a second gas/liquid contacting chamber and introducing to said second contacting chamber a second scrubbing liquid for gas/liquid contacting therein, wherein the first gas/liquid contacting in the first

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chamber comprises co-current flow of the gas stream and scrubbing liquid, and wherein the second gas/liquid contacting in the second contacting chamber comprises countercurrent flow of the gas stream and the second scrubbing liquid through the second contacting chamber, wherein said second contacting chamber has a smaller volume than that of said first contacting chamber. 61.

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- The process according to claim 61 further comprising introducing a chemical reagent for contact with the gas effluent component to remove same from the gas effluent in the first scrubbing zone.
- 63. The process according to claim 61 further comprising introducing a gas into the first scrubbing zone to enhance removal of silane, if present.
- 64. The process according to claim 61 further comprising introducing an antifoam agent to scrubbing liquid for said gat/liquid contacting, to suppress foam production in the first and/or second scrubbing zone.